

Title (en)

CAMERA MODULE, AND PORTABLE TERMINAL AND INFORMATION TERMINAL WITH THE SAME

Title (de)

KAMERAMODUL, TRAGBARES ENDGERÄT UND INFORMATIONSENDGERÄT DAMIT

Title (fr)

MODULE CAMÉRA ET TERMINAL PORTABLE ET TERMINAL D INFORMATIONS ÉQUIPÉ DE CEUX-CI

Publication

EP 1811325 A4 20101110 (EN)

Application

EP 05793682 A 20051012

Priority

- JP 2005018795 W 20051012
- JP 2004305275 A 20041020
- JP 2004305276 A 20041020
- JP 2005231857 A 20050810
- JP 2005231858 A 20050810

Abstract (en)

[origin: EP1811325A1] A camera module and a portable terminal comprising the camera module, in which an auto-focus (AF) function and a zoom function are assembled by using a friction drive-type drive source such as a piezoelectric element, which are constructed to be small in size and light in weight, and which are resistant to chips produced through frictional contact between the piezoelectric element and a driven member. The camera module has a lens holding section for holding at least one or more optical lenses (4) and provided with a shaft hole portion, a shaft member inserted in the shaft hole portion and installed substantially in parallel with the optical axis, a piezoelectric element (10) having at an end an operation portion that is in contact with the shaft member and is placed in the vicinity of the shaft hole portion of the lens holding section, and an adhesive member (271s) provided in the vicinity of the shaft hole portion. As a result, the camera module is small in size and light in weight, and chips produced through frictional contact between the piezoelectric element (10) and the driven member are prevented from scattering by the adhesive member (271s).

IPC 8 full level

G02B 7/04 (2006.01); **G02B 7/02** (2006.01); **H04N 5/225** (2006.01)

CPC (source: EP KR US)

G02B 7/102 (2013.01 - EP KR US); **G02B 13/009** (2013.01 - EP KR US); **G03B 3/10** (2013.01 - KR); **G03B 5/00** (2013.01 - KR); **G03B 13/36** (2013.01 - KR); **H04N 23/52** (2023.01 - EP US); **H04N 23/55** (2023.01 - EP US); **G03B 2205/0007** (2013.01 - KR); **G03B 2205/0069** (2013.01 - KR)

Citation (search report)

- [XA] US 5644440 A 19970701 - AKADA HIROSHI [JP]
- See references of WO 2006043456A1

Cited by

CN105190391A; WO2020173720A1

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

EP 1811325 A1 20070725; **EP 1811325 A4 20101110**; **EP 1811325 B1 20111012**; KR 101159385 B1 20120703; KR 20070083753 A 20070824; US 2007229702 A1 20071004; WO 2006043456 A1 20060427

DOCDB simple family (application)

EP 05793682 A 20051012; JP 2005018795 W 20051012; KR 20077009118 A 20051012; US 57667305 A 20051012